

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application.

1. (Currently Amended) A high-strength thick steel plate excellent in low temperature toughness at heat affected zone resulting from large heat input welding of more than 20kJ/mm, the high strength steel plate having a thickness of at least 50 mm, and consisting ~~essentially~~ of, by wt%,

C: 0.03-0.14%,

Si: 0.30% or less,

Mn: 0.8-2.0%,

P: 0.02% or less,

S: 0.005% or less,

Al: 0.012 - 0.040%,

N: 0.0010-0.0100%,

Ni: 0.8-4.0%,

Ti: 0.005-0.030%, ~~and~~

Nb: 0.003-0.010%,

optionally, at least one of Mg: 0.0003-0.0050%, and REM: 0.001-0.030%, and at least 100/mm² of oxide particles containing O: 0.0010-0.0050%, and having an equivalent circle diameter of 0.005 to 0.5 μ m,

optionally at least one of: B: 0.0005-0.0050%, Cr: 0.1-0.5%, Mo: 0.01-0.5%, V: 0.005-0.10%, and Cu: 0.1-1.0%,

~~where Ni and Mn satisfy equation [1], and the a balance of iron and unavoidable impurities,~~ where Ni and Mn satisfy equation [1]:

$$\text{Ni/Mn} \geq 10 \times \text{Ceq} - 3 \quad (0.36 \leq \text{Ceq} \leq 0.42) \quad [1]$$

where, $\text{Ceq} = \text{C} + \text{Mn}/6 + (\text{Cr} + \text{Mo} + \text{V})/5 + (\text{Ni} + \text{Cu})/15$.

2. (Currently Amended) ~~A~~ The high-strength thick steel plate ~~excellent in low temperature toughness at heat affected zone resulting from large heat input welding of more than 20kJ/mm, the high strength steel plate having a thickness of at least 50 mm,~~ according to claim 1, ~~further consisting essentially of~~ containing, by wt%, one or more of:

~~Ca: 0.0003-0.0050%,~~

Mg: 0.0003-0.0050%, and

REM: 0.001-0.030%, and

contains at least 100/mm² of oxide particles containing O: 0.0010-0.0050% and having an equivalent circle diameter of 0.005 to 0.5 μm.

3. (Currently Amended) The high-strength thick steel plate ~~excellent in low temperature toughness at heat affected zone resulting from large heat input welding of more than 20kJ/mm, the high strength steel having a thickness of at least 50 mm, according to claim 1, further consisting essentially of~~ containing, by wt%, one or more of:

B: 0.0005-0.0050%,

Cr: 0.1-0.5%,

Mo: 0.01-0.5%,

V: 0.005-0.10%, and

Cu: 0.1-1.0%.

4. (Currently Amended) The high-strength thick steel plate ~~excellent in low temperature toughness at heat affected zone resulting from large heat input welding of more than 20kJ/mm, the high strength steel having a thickness of at least 50 mm, according to claim 2~~ 1, ~~further consisting essentially of~~ containing, by wt%, one or more of:

B: 0.0005-0.0050%,

Cr: 0.1-0.5%,

Mo: 0.01-0.5%,

V: 0.005-0.10%, and

Cu: 0.1-1.0%.

5. (Canceled)